Detailed agenda - Day 1

- ✓ Welcome / introduction
- ✓ Introduction to four principles of environmental restoration
- ✓ Principle 1: Building an effective project team
- ✓ Break
- ✓ Principle 2: Problem identification and definition
- ✓ Lunch
- ✓ Principle 3: Early identification of likely response actions
- ✓ Break
- ✓ Principle 4: Managing uncertainties
- ✓ Wrap-up

Introduction 2r

Your role in this workshop

- To get the most out of this workshop:
 - ✓ Set aside "perceptions" of regulatory constraints
 - ✓ Actively participate
 - Continually assess how the course principles can be applied to your projects

This workshop:

- Maintains a strategic focus rather than emphasizing process or specific
 "tools" we assume you know the process and tools well enough
- Identifies underlying principles that result in successful streamlining of environmental restoration projects, recognizing that these principles will always need to be tailored to site-specific circumstances
- Is based on extensive field experience and successful implementation of these principles in environmental restoration projects
- Relies extensively on short presentations, examples, and group discussion.
 You will be working in a group, or "core team" throughout the course to complete several short exercises and two longer case studies
- Work to build an effective core team of decision makers on exercises and case studies

Introduction 3r

Key terms defined

Core team - Consists of key decision makers, including DOE, EPA, and State agencies that decide, by consensus, all major aspects of a project. A subset of the extended project team.

Extended project team - Composed of the DOE project team, EPA and State regulatory staff, and public interest groups (e.g., site-specific advisory boards). These individuals interact throughout a project and are responsible for providing input necessary for the core team to make decisions.

Conceptual site model (CSM) - A combination of text, source-pathway-receptor diagrams, and conceptual diagrams that together provide a qualitative understanding of the site. Serves as the hypothesis for the problems, likely response actions, and uncertainties.

Problem - A site condition posing real or potential unacceptable risk, or that the core team determines requires a response. Problems should be definable in terms of an environmental medium, geographic features, the types of waste present or suspected, or the type of waste units that exist.

Uncertainty - A parameter or condition, the value/nature of which cannot be currently stated with sufficient certainty to accommodate moving forward without further consideration. Can refer to circumstances about whether a problem exists and what to do to respond to the problem. (As used in this course, uncertainty does not refer solely to accuracy, precision, or reproducibility of data.)

Uncertainty management - Approaches to managing uncertainty by (1) reducing uncertainty by careful design of a measurement system (review of existing data, new data collection) and (2) developing contingency plans to manage uncertainties.

Hierarchy of probable technologies - Potential general response actions, and potentially applicable technology types and process options that are identified based on an evaluation with regard to effectiveness, technical and administrative implementability, and cost.

Decision rules - Statements that establish the relationship between data to be collected and the use(s) of that data. Decision rules generally are "If/then/else" statements that establish whether site conditions are problems and what decisions or actions will be taken based on results of data collection.

Contingency planning - An agreed-to plan by which an uncertainty is managed through a preapproved activity for potential deviations from the expected site condition(s) encountered during remediation.

Release site - A site where there is or could be an uncontrolled or threatened release of a hazardous substance, hazardous constituent, or hazardous waste.

Risk - The current, potential, or perceived threat to human health and the environment posed by a site

Introduction 4r